



Agenda
#5
9/22/08

TOWN OF ACTON
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Engineering Department

INTERDEPARTMENTAL COMMUNICATION

To: Steve Ledoux, Town Manager

Date: August 19, 2008

From: Engineering Department

Subject: National Grid, Cathodic Protection Work Request - Rectifier & Rectifier Pole
1.) Kinsley Road @ Kinsley Lane and
2.) Willow Street @ Duggan Road

We have reviewed the sketch of the proposed work from National Grid to install a cathodic protection facility at the following locations:

- **Kinsley Road @ Kinsley Lane @** utility pole #9 – between house #17-#21
- **Willow Street @ Duggan Road @** utility pole #46 – next to house #179 Willow St

I had spoken with Keyspan (now called National Grid) & their subcontractor in the past while reviewing prior request to install the same type of facility at 4 other locations in Town (Kingman Road, Country Club Road, School Street & Wood Lane). According to our discussions, this work is being proposed in order to provide corrosion protection for the existing gas mains. There are two components of the cathodic protection facility. The first part of the corrosion protection will be a 6" x 6" pressure-treated post that will be set approximately 5-6 feet from the existing utility poles. This post will be about 6-feet in height above the ground surface and will be used to attach the proposed electric meter and the mechanical devices used for the corrosion protection. We were told by National Grid that the electric wiring to the existing utility pole will be installed underground for all these units. We were also told by National Grid that they were unable to obtain permission to install these units onto the existing utility poles. As a result, they have to install these posts so that they can attach the required devices necessary for the corrosion protection. Below are photos of an existing rectifier pole located on Parker Street at the intersection of River Street:



Figure 1- Existing Rectifier Pole on Parker St opposite River Street

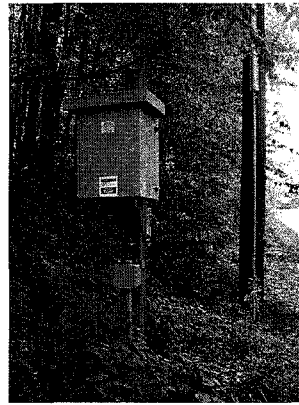
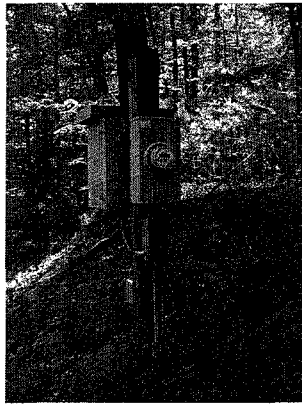


Figure 2 - Typical set-up of an existing National Grid cathodic protection rectifier pole

The second part of the cathodic protection is a series of metal rods (anodes) that will be drilled into the ground for a depth of about 35-feet. I was told by National Grid that these metal rods and the associated wiring will be entirely underground.

We recommend that the Board of Selectmen also consider the following conditions:

1. This approval is conditional and National Grid is required to relocate the facilities, at no additional cost to the Town, to accommodate future considerations by the Town such as sidewalks, etc...
2. The approval of these facilities is limited to the exact dimensions (height, width, etc) as set forth in this submittal. National Grid cannot increase the size of these facilities or add additional units without first obtaining approval from the Board of Selectmen.
3. No other facilities from other utility companies can be added onto this unit without first obtaining approval from the Board of Selectmen.
4. National Grid will install screening around these facilities, as appropriate, to obstruct the view of these units to maintain the character of the Town.
5. National Grid shall pay a fee to the Town to allow these facilities to be installed on Town property. We recommend that the Town charge a \$40 fee per location. This is the

same fee that is charged for petitions for new utility poles.

6. National Grid will be responsible to ensure that the work does not encroach onto private property. If the work is located on private property, National Grid will need to seek permission from the private landowners before they can enter upon the premises. The Town does not have the authority to grant permission to work on private property.
7. Any locations where National Grid needs to cut the road pavement to access the existing gas main should have the final pavement patch done by the “grind and inlay method” as previously used by the gas company in other locations in Town. National Grid will need to obtain Permits to Construct within a Public Way from this department prior to starting work.

We visited Kinsley Road at the intersection with Kinsley Lane and have the following comment regarding the proposed work:



Figure 3 - UP #9 on Kinsley Road opposite house #17 & #21

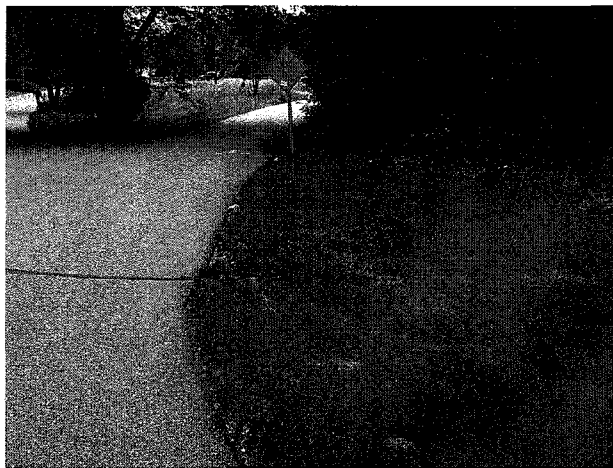


Figure 4 – looking toward Kinsley Lane in front of House #17 – proposed location for anode bed

- The plans for Kinsley Lane indicate that the road layout is only 20 feet wide. The sketch from National Grid appears to indicate the edge of the road layouts for Kinsley Road and Kinsley Lane. As shown on the sketch, the proposed anodes will be located on private property owned by house #17. As stated above, if the work is located on private property, National Grid will need to seek permission from the private landowners before they can enter upon the premises. The Town does not have the authority to grant permission to work on private property.

We also visited Willow Street at the intersection with Duggan Road and have the following comment regarding the proposed work:



Figure 5 - UP #46 on Willow Street looking towards Duggan Road



Figure 6 – Duggan Road looking towards Willow Street

- The plans for Willow Street location also seem to indicate the edge of the road layouts for Willow Street & Duggan Road. The sketch appears to show the proposed utilities on private property. If so, National Grid will need to seek permission from the private landowners before they can enter upon the premises. The Town does not have the authority to grant permission to work on private property.
- National Grid will be trenching across the driveway for house #179 & possibly the bark mulch in front of the house in order to access the gas main on Duggan Road. National Grid should repave the driveway in compliance with the Town Specifications for Regulating Work within Public Ways, and replace the bark mulch with the same type of material.

As long as the work is located on Town property, we do not foresee any problems with granting this petition. If you have any questions, or need additional information, please let us know.

nationalgrid

SCANNED

Engineer: Butch Vincent
Office Phone: 781-466-5188
Mobile Phone: 617-438-5192
Nextel DC: 648

CATHODIC PROTECTION WORK REQUEST

REQUESTED TO: MSFLEO CORROSI WO Number: 584776 FOUND DATE: 10/25/2007
CP SYSTEM: DACT0104 Town Code: ACT DUE DATE: 12/24/2007
REPAIR CODE: X-Install Rectifier/Ground Bed PRIORITY: 5
REPAIR LOCATION: KINSLEY RD, ACT, @ KINSLEY LANE
INTERSECTING STREET 1: INTERSECTING STREET 2:

REPAIR REMARKS:

X-INSTALL RECTIFIER/GROUNDBED
DACT0104
INSTALL RECTIFIER AND GROUNDBED and electric service

DIG SAFE:

WATER:

SEWER:

CONSERVATION:

WORK DONE:

DATE COMPLETED:

MAX# 584776

KINSLEY ROAD,
ACTON, MA.

UNDERGROUND AC
SERVICE TO
RECTIFIER POLES ~~10~~

PROPOSED -
RECTIFIER
ZONE

#8 CP ANODE CABLE
LOOPED BACK TO
RECTIFIER

-INSTALL (6) 3" X 120" MIXED METAL
OXIDE ANODES VERTICALLY TO A
DEPTH OF THIRTY (30) FEET
BOTTOM OF ANODE ALONG SHOULDER
OF ROAD (KINSLEY LANE)

1. All anodes connected to anode cable by split bolt connector and protected by plyflex splice kit or equal.
2. All cable installed inside PVC pipe and buried to a minimum depth of 18 inches.
3. After all pre-marks of other underground structures have been completed, NECP must field verify the location of these foreign structures prior to any excavation. The location of anode placement and/or cables may be altered at this time.

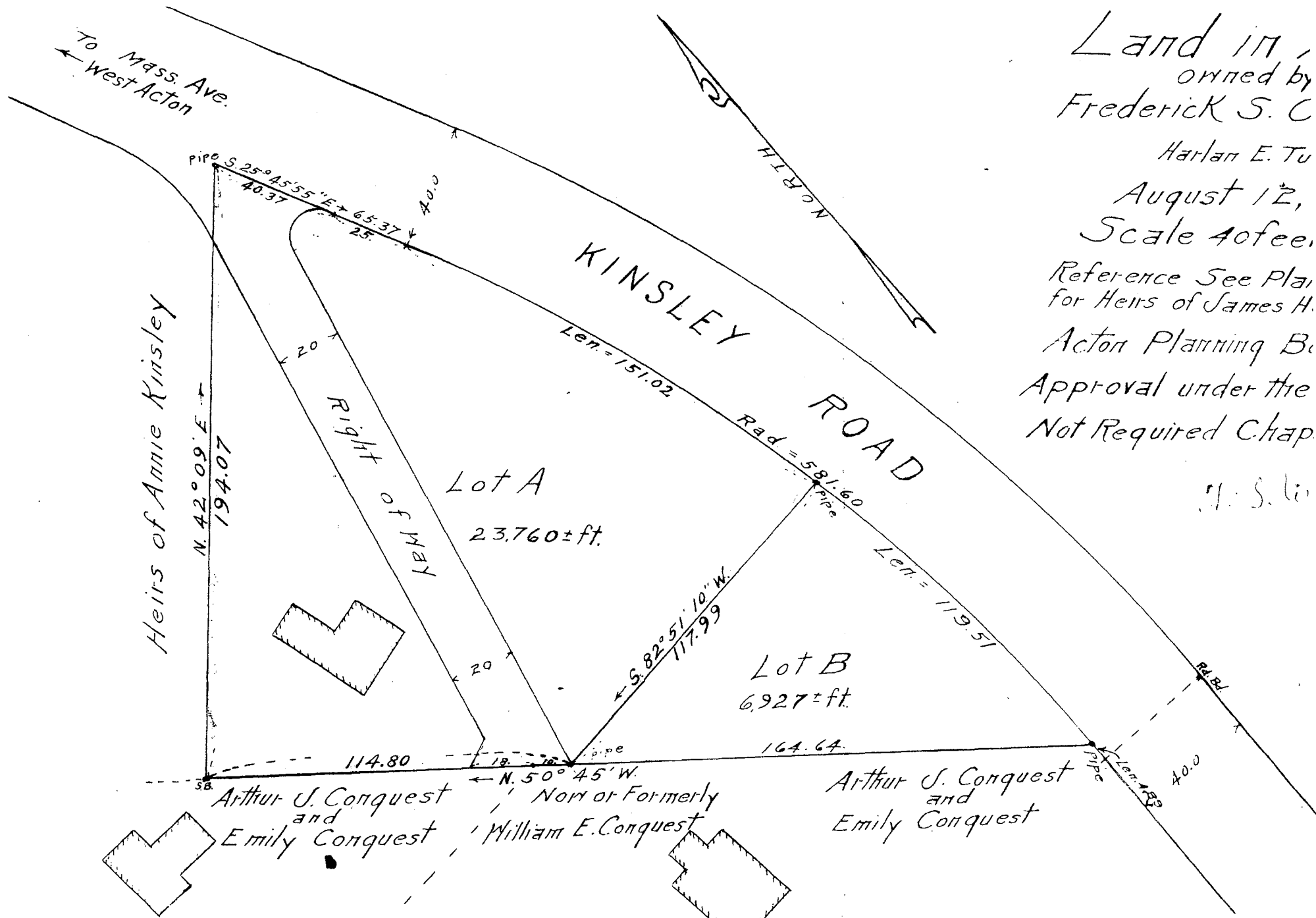
Land in,
owned by
Frederick S. C

Harlan E. Tu

August 12,
Scale 40 feet.

Reference See Plan
for Heirs of James H.
Acton Planning B.
Approval under the
Not Required Chap.

g. S. 10



nationalgrid

SCANNED

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Office Phone: 781-466-5188
Mobile Phone: 617-438-5192
Nextel DC: 648

CATHODIC PROTECTION WORK REQUEST

REQUESTED TO: MSFLEO CORROSI WO Number: 612843 FOUND DATE: 06/06/2008

CP SYSTEM: DACT0102 Town Code: ACT DUE DATE: 08/05/2008

REPAIR CODE: X-Install Rectifier/Ground Bed PRIORITY: 5

REPAIR LOCATION: WILLOW ST, ACT

INTERSECTING STREET 1:

INTERSECTING STREET 2:

REPAIR REMARKS:

X-INSTALL RECTIFIER/GROUNDBED
DACT0102

DIG SAFE:

WATER:

SEWER:

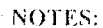
CONSERVATION:

WORK DONE:

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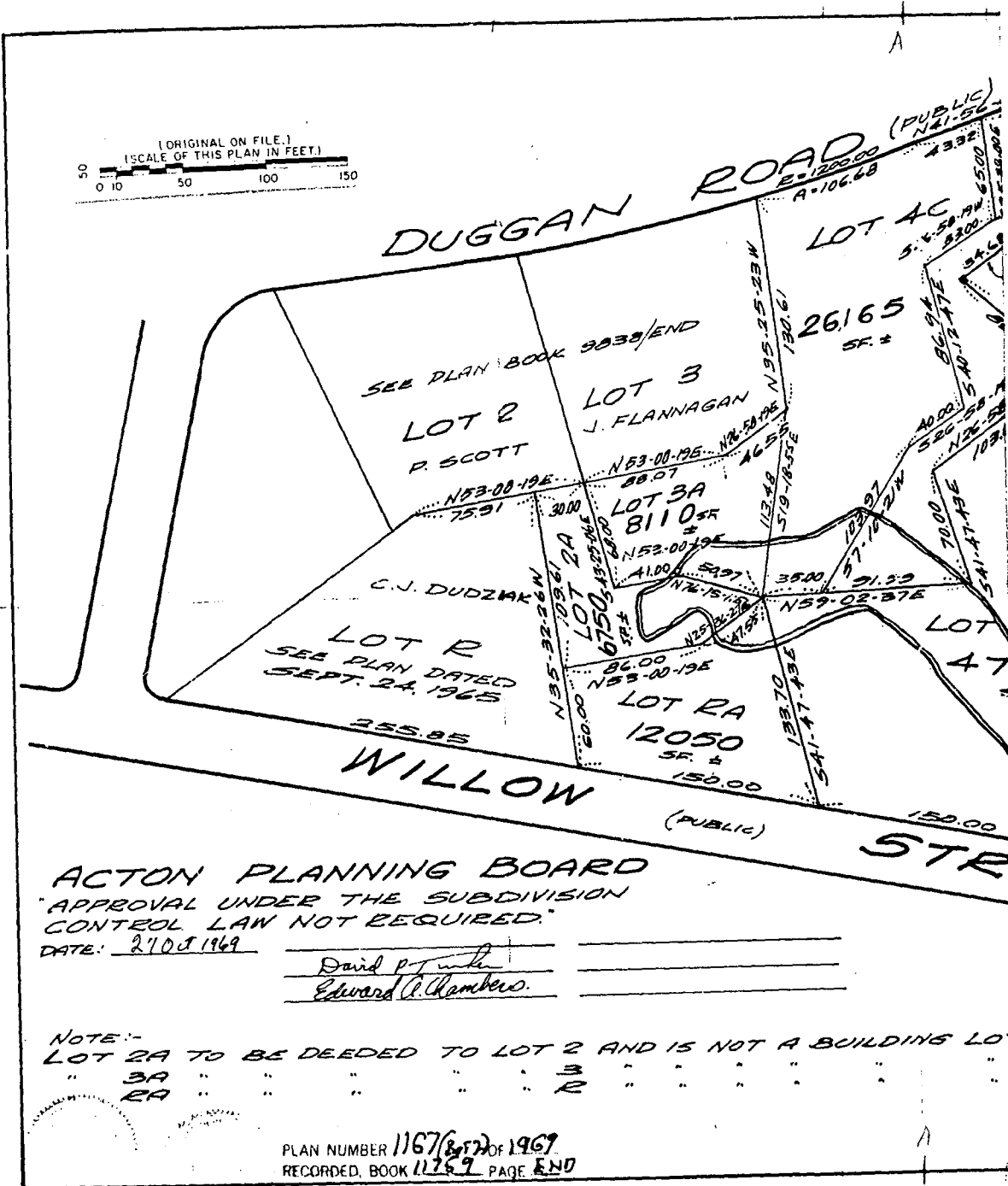
DATE COMPLETED:

NOTE: WETLANDS PERMIT MAY BE REQUIRED.



- DACT 0102

PROPOSED RECTIFIER AND
GROUND BED INSTALLATION
WILLOW STREET
ACTON, MA.



1167 of 1969, (13)